



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,220	07/20/2001	Charles M. Rowe	01P12721US	2703

7590 10/21/2003

Siemens Corporation
Intellectual Property Department
186 Wood Avenue South
Iselin, NJ 08830

EXAMINER

PICKARD, ALISON K

ART UNIT	PAPER NUMBER
----------	--------------

3676

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/910,220

Applicant(s)

ROWE, CHARLES M.

Examiner

Alison K. Pickard

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 22-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Satterthwaite in view of Lowther (4,654,550).

Cooper discloses an air gap baffle sealing system in a generator having a stator and a rotor. The sealing system 35 comprises an air gap baffle seal sandwiched between two rings 47 secured by a bolt 65. The bolt is mounted substantially parallel to the gap and the bolt head is accessible from an outer end of the generator. The baffle seal can be replaced or repaired without requiring the removal of the rotor. Cooper does not disclose that the parallel ring has a channel for receiving a seal having a hollow portion that can extend the seal from a non-sealing position to a sealing position when filled with a medium. Satterthwaite teaches an adaptable seal that can attain a sealing and non-sealing position between a stator and rotor. Satterthwaite teaches that using such a seal eliminates precise dimensioning requirements and is capable of achieving a varied degree of sealing. Satterthwaite also teaches mounting the seal in a housing (figs. 1 or 5) comprising two halves. The seal is received in a channel in at least one of the rings. The other ring can be considered an access portion. The seal has a hollow portion that can be filled with a medium, such as gas, to expand the seal to its operation (sealing) orientation. Therefore, it would have been obvious for one of ordinary skill in the art at the time the

Art Unit: 3676

invention was made to modify the sealing system of Cooper by using the channel and inflatable seal taught by Satterthwaite to provide an effective seal that can be adapted between a service or non-sealing position to allow a varied degree of sealing as well as being easier to make and install.

Regarding the bolt, Satterthwaite teaches the ring and access portion are joined together by suitable fastening means, which are not shown. Satterthwaite does not disclose that the fastener is a bolt parallel to the air gap. Lowther teaches an air gap baffle sealing assembly having two parts 30 and 31 fastened together by a bolt. The bolt has a head accessible from an outer end of the generator for easy access. The bolt is parallel to the air gap. Lowther teaches the bolt is a suitable fastener to join halves together in a sealing assembly. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use a bolt to fasten the two halves of Satterthwaite together as such is taught to be a suitable fastening means by Lowther. (Note: Wilkinson, Calfo, and Buckshaw also teach a parallel bolt as a suitable fastener for mating portions in a sealing assembly.)

Response to Arguments

3. Applicant's arguments filed 8-7-03 have been fully considered but they are not persuasive and are considered moot in view of the new ground(s) of rejection.
4. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

Art Unit: 3676

USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Satterthwaite teaches an adjustable seal that does not require precise dimensioning to achieve the desired degree of seal. An adjustable seal also provides improved sealing because the wear can be controlled. Satterthwaite teaches a construction that is easily mounted. Satterthwaite also teaches a construction that protects the seal from over pressurization and/or puncture. Satterthwaite teaches the seal can be used in various environments between stationary, sliding, or rotating shafts, conduits, or support bodies. It is Satterthwaites teaching of an easily installed, adjustable seal that allows various degrees of sealing along a passageway that is being applied to Cooper.

5. In response to applicant's argument that there is no mention of generators in Satterthwaite or expandable seals in Cooper, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Cooper already discloses a sealing system in an air gap to restrict airflow. Satterthwaite teaches a sealing system that can be used in various environments that offers improved sealing and control of the desired degree of sealing along a gap.

6. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the

Art Unit: 3676

time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, both Satterthwaite and Cooper disclose sealing assemblies having a seal sandwiched between two rings secured by a bolt. Satterthwaite teaches an improved seal that is adjustable. It is this assembly that is used to improve the desired restriction of airflow along the gap in Cooper. The modification would be made of the entire seal 35 of Cooper, not just the seal material 50. Further, it is known in the generator industry to use an adjustable sealing assembly as the air gap baffle sealing assembly as evidenced by Calfo '645. And, it is known in the sealing industry that inflatable seals offer more control of sealing degree and wear as evidenced by Satterthwaite, Calfo, and Wilkinson. It is also known that a bolt is a suitable fastening means to secure two mating components/rings together as evidenced by Wilkinson, Lowther, Calfo, and Buckshaw. One of ordinary skill in the art at the time the invention was made would have been lead to use an adjustable seal as an air gap baffle seal that offers easy installation and controlled sealing and wear.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 703-305-0882. The examiner can normally be reached on M-F (9-6:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703-308-3179. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 3676

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1113.


Alison K. Pickard
Examiner
Art Unit 3676

AP